

**FISCAL YEAR 2011 ANNUAL REPORT**

**FOR THE CITY & COUNTY OF HONOLULU**

**MUNICIPAL SEPARATE STORM SEWER SYSTEM**

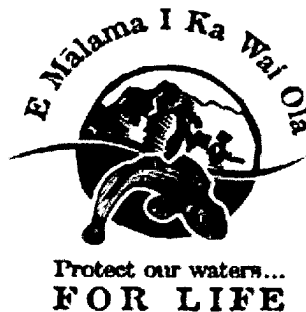
**NPDES PERMIT NO. HI S000002**

**COVERING THE PERIOD**

**JULY 1, 2010 TO JUNE 30, 2011**

**FINAL (October 2011)**

Department of Environmental Services  
City & County of Honolulu





## CHAPTER 7 INDUSTRIAL AND COMMERCIAL ACTIVITIES

The City extends its storm water management oversight to include discharges from various industrial and commercial activities.

This section discusses the following six requirements to monitor discharges from industrial and commercial activities:

- Inventory and Mapping of Industrial Facilities,
- Inventory and Mapping of Commercial Facilities,
- Prioritization of Inspection,
- Inspection Program,
- Enforcement Policy, and
- Training of Facility Inspectors.

### 7.1 COMPLIANCE STATUS

#### ***D.1.g.(1) Inventory and Map of Industrial Facilities and Activities.***

*The Permittee shall update and submit, in electronic and paper format, the industrial facilities and activities inventory (industrial inventory), sorted by TMK, and map of such facilities and activities discharging, directly or indirectly, to its MS4 within the 4" End-of-Year Report (also known as the permit renewal application). The industrial inventory update may be based on the following:*

- *Available information about parcel owners from the City and the State; and/or*
- *Collection of new information obtained during field activities or through other readily available intra-agency informational databases (e.g., business licenses, pretreatment permits, sanitary sewer hook-up permits).*

*The industrial inventory shall include the facility name, street address, TMK, nature of business or activity, Standard Industrial Classification (SIC) code(s) that best reflect the facility product or service, principal storm water contact, receiving State water, and whether a Notice of General Permit Coverage (NGPC) under HAR, Chapter 1 I-55, Appendix B, NPDES General Permit Authorizing the Discharge of Storm Water Associated with Industrial Activities (General Industrial Storm Water permit) or any other applicable NPDES permit has been obtained, including a permit or file number and issuance date.*

*At a minimum, the industrial inventory shall include facilities and activities such as:*

- *Municipal Landfills (open and closed)*
- *Hazardous waste recovery, treatment, storage and disposal facilities*
- *Facilities subject to Section 313 of the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. 11023*
- *Facilities subject to General Industrial Storm Water permit coverage or any other applicable NPDES permit coverage*

*And any other industrial facility that either the Permittee or DOH determines is contributing a substantial pollutant loading to the City MS4.*

#### ***Current Status of Permit Requirements:***

It is estimated that there are approximately 325 private industrial facilities that may potentially contribute pollutants to the City's MS4.

The City has developed an industrial facilities inventory database and is currently updating the database as industrial inspections are conducted.

The City received an inventory of General and Individual NPDES permittees from DOH.

#### ***Past Year Activities (Jul 1, 2010 to Jun 30, 2011):***

Inventory mapping has been completed.

Information obtained through field activities was collected: the City identified approximately 41 more industrial facilities.

#### ***Future Activities:***

Continue to identify industrial facilities through inspections and update maps accordingly.

## **(2) Inventory and Map of Commercial Facilities and Activities.**

The Permittee shall update and submit, in electronic and paper format, the commercial facilities and activities inventory (commercial inventory), sorted by priority areas, and map of such facilities and activities discharging, directly or indirectly, to its MS4 within the permit renewal application. The commercial inventory update may be based on the following:

- Available information about parcel owners from the City and the State; and/or
- Collection of new information obtained during field activities or through other readily available intra-agency informational databases (e.g., business licenses, pretreatment permits, sanitary sewer hook-up permits).

The commercial inventory shall include, by priority area, the facility name, street address, TMK, nature of business or activity, SIC code(s) that best reflect the facility product(s) or service(s), principal storm water contact, and receiving State water.

At a minimum, the commercial inventory shall include facilities and activities such as:

- Retail Gasoline Outlets
- Retail Automotive Services, including Repair Facilities
- Restaurants

Any other commercial facility that either the Permittee or DOH determines is contributing pollutants to the City MS4 that may cause or contribute to an exceedance of State water quality standards.

## **(3) Prioritized Areas for Industrial and Commercial Facility and Activity Inspections.**

The Permittee shall continue to update the plan to designate priority areas for industrial and commercial facility and activity inspections. The prioritized area plan should take into account the number of industrial and commercial facilities in the area, the density of these facilities, previous storm water violations in the area, and water quality impairments in the area. The plan shall identify priority areas and set a schedule for inspections within each area over the duration of this permit. The prioritized area plan shall be submitted to DOH within one (1) year of the effective date of this permit.

### Current Status of Permit Requirements:

It is estimated that there are approximately 5,400 private commercial facilities that may potentially contribute pollutants to the City's MS4.

The City has developed a commercial facilities inventory database.

The City received an inventory of General and Individual NPDES permittees from DOH.

### Past Year Activities (Jul 1, 2010 to Jun 30, 2011):

Inventory mapping has been completed.

Information obtained through field activities was collected: the City visited 356 commercial facilities of which 356 facilities were added to the database.

### Future Activities:

Continue to identify commercial facilities through inspections and update maps accordingly.

### Completion of Permit Requirements:

The City has designated inspection priority areas from FY06 to FY11 as follows:

FY06	Pearl City Industrial Park
FY07	Kaneohe Industrial Park
FY08	Aiea/Pearl City
FY09	Waipahu Business Center
FY10	Gentry Business Park
FY11	Kailua Semi-Industrial Park

#### **(4) Inspection of Industrial and Commercial Facilities and Activities.**

*The industrial/commercial inspection program shall be submitted within one (1) year of the effective date of this permit and updated as appropriate to reflect the outcomes of the investigations discussed in the following paragraphs.*

*The Permittee shall ensure that all industrial and commercial facilities and activities identified in the industrial and commercial inventories required under Parts D.1.g(1) and D.1.g(2) are inspected according to the schedule below.*

*Inspectors shall determine compliance with local ordinances and the terms of this permit. If DOH inspects a facility for compliance with the General Industrial Storm Water permit coverage or any other applicable NPDES permit, then the Permittee does not need to inspect the facility that year.*

*All industrial facilities within a priority area shall be inspected in accordance with the applicable portions of the "NPDES Compliance Inspection Manual" (EPA 300-B-94-014), dated September 1994. The Permittee shall send the inspection report(s) to the DOH within two (2) months of the inspection date. The Permittee shall also inspect commercial facilities in the priority area to ensure compliance with local ordinances and the terms of this permit. The Permittee shall conduct, at a minimum in aggregate, the following number of industrial and commercial inspections each year in the priority area scheduled for inspection and re-inspection.*

<i>Permit Year</i>	<i>Number of Inspections</i>
1	100
2	150
3	200
4	300
5	400

*Inspections must consist of a review of implementation of BMPs for compliance with local ordinances and this permit to assess potential impacts to receiving waters. Inspections shall also assess potential sources of pollutants to the City MS4 and require controls to prevent discharge of pollutants to the City MS4.*

*Inspectors shall be trained to identify deficiencies, assess potential impacts to receiving waters, and evaluate the appropriateness and effectiveness of deployed BMPs and SWPCPs, if applicable.*

*The inspectors shall use an inspection checklist, or equivalent, and photographs to document site conditions and BMP conditions.*

*Records of all inspections shall be maintained for a minimum of five (5) years, or as otherwise indicated.*

#### **Current Status of Permit Requirements:**

The industrial/commercial inspection program was submitted in the SWMP (March 2007).

The City has been conducting at least one field screening survey of a priority area annually since FY95. In addition, 1,972 inspections have been conducted between FY06 and FY11.

#### **Past Year Activities (Jul 1, 2010 to Jun 30, 2011):**

Completed 412 industrial/commercial inspections including 36 located in the Kailua Semi-Industrial Park (FY11 priority area).

#### **Future Activities:**

Kapaa Industrial Park is the Priority area for FY12.

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**(5) Enforcement Policy for Industrial Facilities and Activities.**

*The Permittee shall develop and submit an enforcement policy that shall go into effect when it has been documented that an industrial or commercial facility has failed to comply with local ordinances and/or terms of this permit. This policy shall be submitted to DOH for review and acceptance within 180 days of the effective date of this permit. The policy shall be part of the overall escalating enforcement policy and must consist of the following:*

- *Issuance of written documentation to a facility representative within two (2) weeks of storm water deficiencies identified during inspection. Documentation must include copies of all field notes, correspondence, photographs, and sampling results if applicable.*
- *A timeline for correction of the deficiencies.*
- *Provisions for re-inspection and potential enforcement actions, if necessary.*

*In the event the Permittee has exhausted all available sanctions and cannot bring a facility or activity into compliance with local ordinances and this permit, or otherwise deems the facility or activity an immediate and significant threat to water quality, the Permittee shall provide oral notification to DOH within one (1) week of such determination. Oral notification shall be followed by a copy of all inspection checklists, notes, photographs, and related correspondence within two (2) weeks of the determination. In instances where an inspector identifies a facility that has not applied for the General Industrial Storm Water permit coverage or any other applicable NPDES permit, the Permittee shall provide oral notification to DOH within one (1) week of such determination. Such oral notification shall be followed by written notification within two (2) weeks of the determination.*

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**Current Status of Permit Requirements:**

The City has developed an enforcement policy in accordance with the requirements of the current NPDES permit which was submitted to DOH in September 2006. There were 197 deficiency reports issued from FY07 to FY11.

**Past Year Activities (Jul 1, 2010 to Jun 30, 2011):**

Only one facility was sent a deficiency report.

**Future Activities:**

Continue enforcement as required.

**(6) Training.**

*The Permittee shall develop and provide training to staff on how to conduct industrial and commercial inspections, the types of facilities covered by the General Industrial Storm Water permit coverage or any other applicable NPDES permit, elements in a SWPCP for industrial facilities, BMPs and source control measures for industrial and commercial facilities, and inspection and enforcement techniques. The training shall be developed and submitted to DOH for review and acceptance within 90 days of the effective date of this permit. Permittee inspectors shall receive training within 180 days of the effective date of this permit, and annually thereafter.*

**Current Status of Permit Requirements:**

The City has developed training materials and has annually conducted training for SWQ personnel, who currently perform industrial and commercial inspections. The training was submitted to DOH on September 2006.

**Past Year Activities (Jul 1, 2010 to Jun 30, 2011):**

8 Inspectors received training in FY11.

**Future Activities:**

Continue to provide this training annually.

## 7.2 INVENTORY AND MAP OF INDUSTRIAL FACILITIES AND ACTIVITIES

The industrial facilities inventory is kept current based on existing sources of information and include the facility name, street address, TMK, nature of business of activity, Standard Industrial Classification (SIC) codes and status of any applicable NPDES permit requirements.



*Transfer station*

At a minimum, the industrial inventory includes facilities and activities such as: municipal landfills, hazardous wastes recovery, treatment, storage and disposal facilities, facilities subject to Section 313 of the Emergency Planning and Community Right-to Know-Act, facilities subject to General Industrial Storm Water permit coverage or any other applicable NPDES permit coverage, and any other industrial facility that is contributing a substantial pollutant loading to the City's MS4.

It is estimated that there are approximately 325 private industrial

facilities that may potentially contribute pollutants to the City's MS4.

The City has developed an industrial facilities inventory database and performs updates as industrial inspections are conducted.

The City received an inventory of General and Individual NPDES permittees from DOH. Inventory mapping has been completed. Refer to Appendix G.1 and G.2.

## 7.3 INVENTORY AND MAP OF COMMERCIAL FACILITIES AND ACTIVITIES

The commercial facilities inventories will be updated based on existing sources of information and include the facility name, street address, TMK, nature of business of activity, SIC codes and status of any applicable NPDES permit requirements.

At a minimum, the commercial inventory shall include facilities such as retail gasoline outlets, retail automotive services including repair facilities, restaurants, and any other commercial facility that is contributing a pollutant loading to the City's MS4 that may cause or contribute to an exceedance of the State WQS.

It is estimated that there are approximately 5,400 private commercial facilities that may potentially contribute pollutants to the City's MS4.

The City has developed a commercial facilities inventory database and performs updates as information become available.

The City received an inventory of General and Individual NPDES permittees from DOH. Inventory mapping has been completed.



#### 7.4 PRIORITIZED AREAS FOR INDUSTRIAL AND COMMERCIAL FACILITY AND ACTIVITY INSPECTIONS

The City has developed a plan and schedule to inspect industrial and commercial areas by priority as described in Section 5 of the SWMP. The priority areas for FY06-FY11 were as follows:

FY06	Pearl City Industrial Park
FY07	Kaneohe Industrial Park
FY08	Aiea/Pearl City
FY09	Waipahu Business Center
FY10	Gentry Business Park
FY11	Kailua Semi-Industrial Park

Refer to Figures 7-1 to 7-7.

The inspection priority may be changed as additional information becomes available.

The priority sites may be revised, if numerous violations are reported for any industrial area by the public and subsequent inspection and investigation uncover numerous violations of dumping waste material in the MS4. The type of industrial activity (SIC codes), use and management of chemical or raw products, and the size and location of the industrial facility in relation to any sensitive watersheds are taken into account in changing the priority of inspections. Table 7-1, Industrial Site Visits from FY95 to FY14, provides the priority areas that were visited or will be visited from FY95 to FY14.

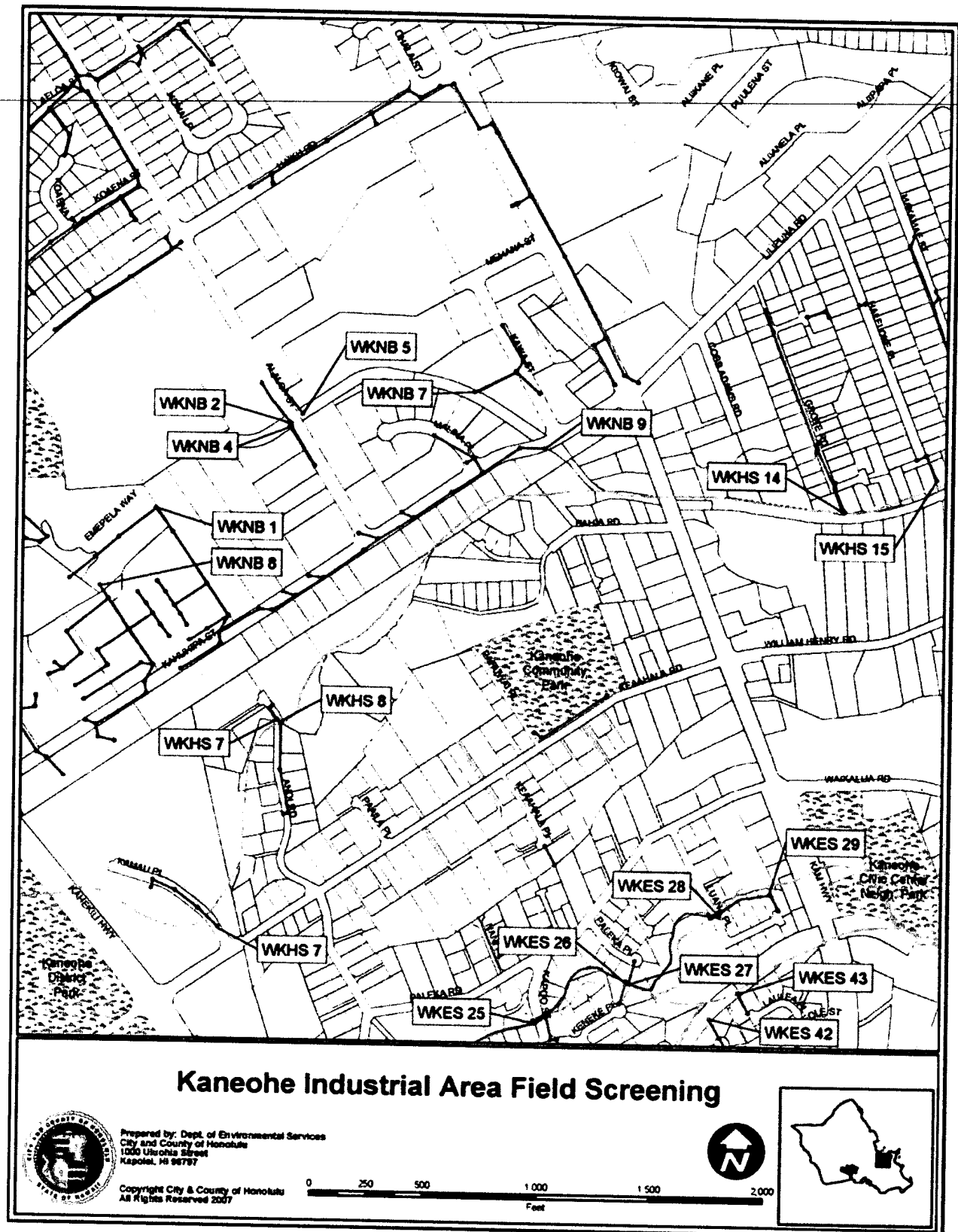


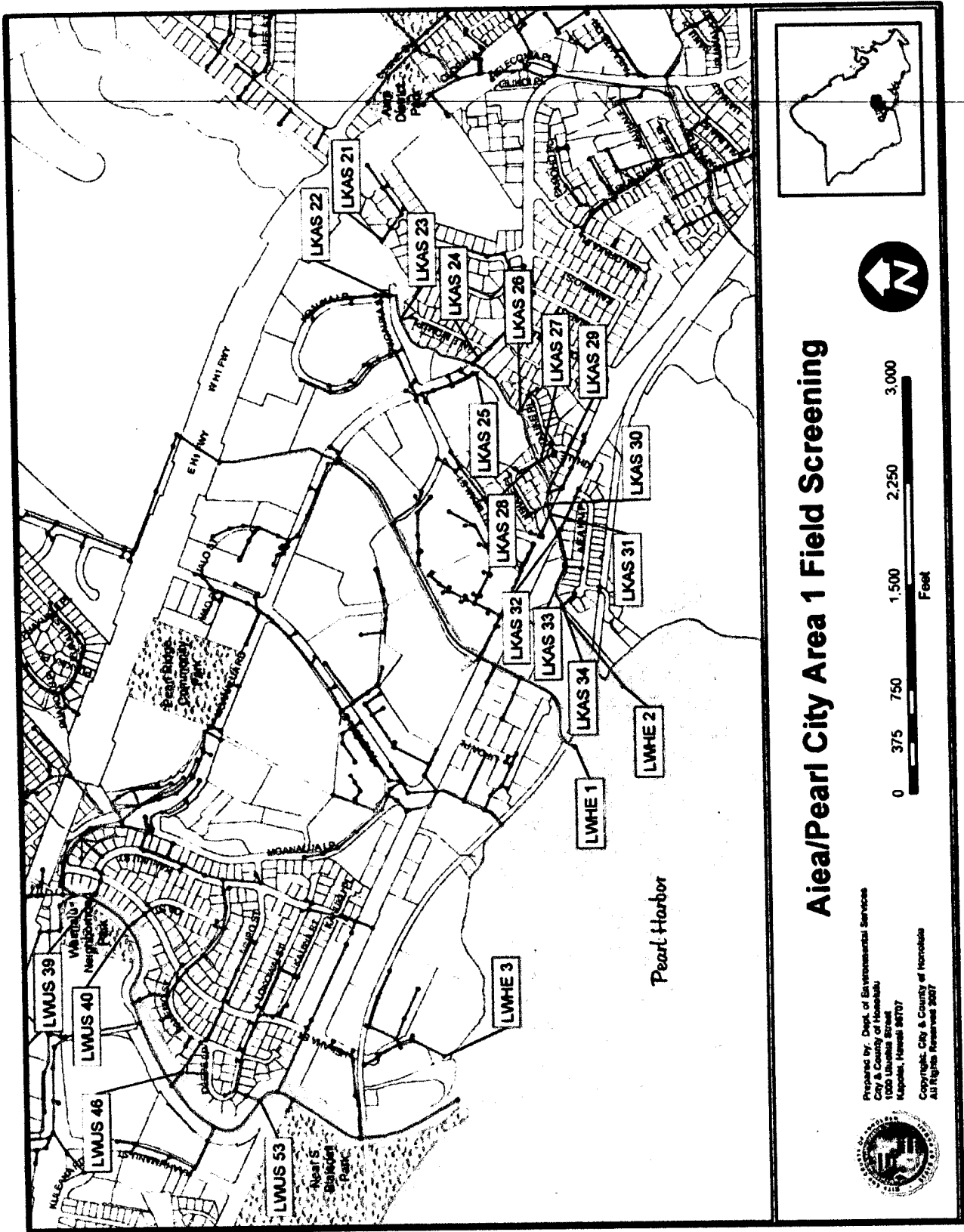
*Inspection of outlets*

**Table 7-1: Industrial Site Visits from FY95 to FY14**

<b>Area</b>	<b>Initial Visit</b>
Mapunapuna	FY95
Airport	FY96
Iwilei	FY97
Kalihi Kai	FY98, 99
Kakaako	FY00
Waipahu	FY01
Ala Moana	FY02
Halawa Valley	FY03
Halawa (Iwaena Street)	FY04
Campbell Industrial Park	FY05
Pearl City (Waihona Street)	FY06
Kaneohe	FY07
Aiea-Pearl City	FY08
Waipahu Business Center	FY09
Gentry Business Park	FY10
Kailua Semi-Industrial Park	FY11
Kapaa Industrial Park (Added)*	FY12
Wahiawa Town (Added)*	FY13
Mapunapuna*	FY14

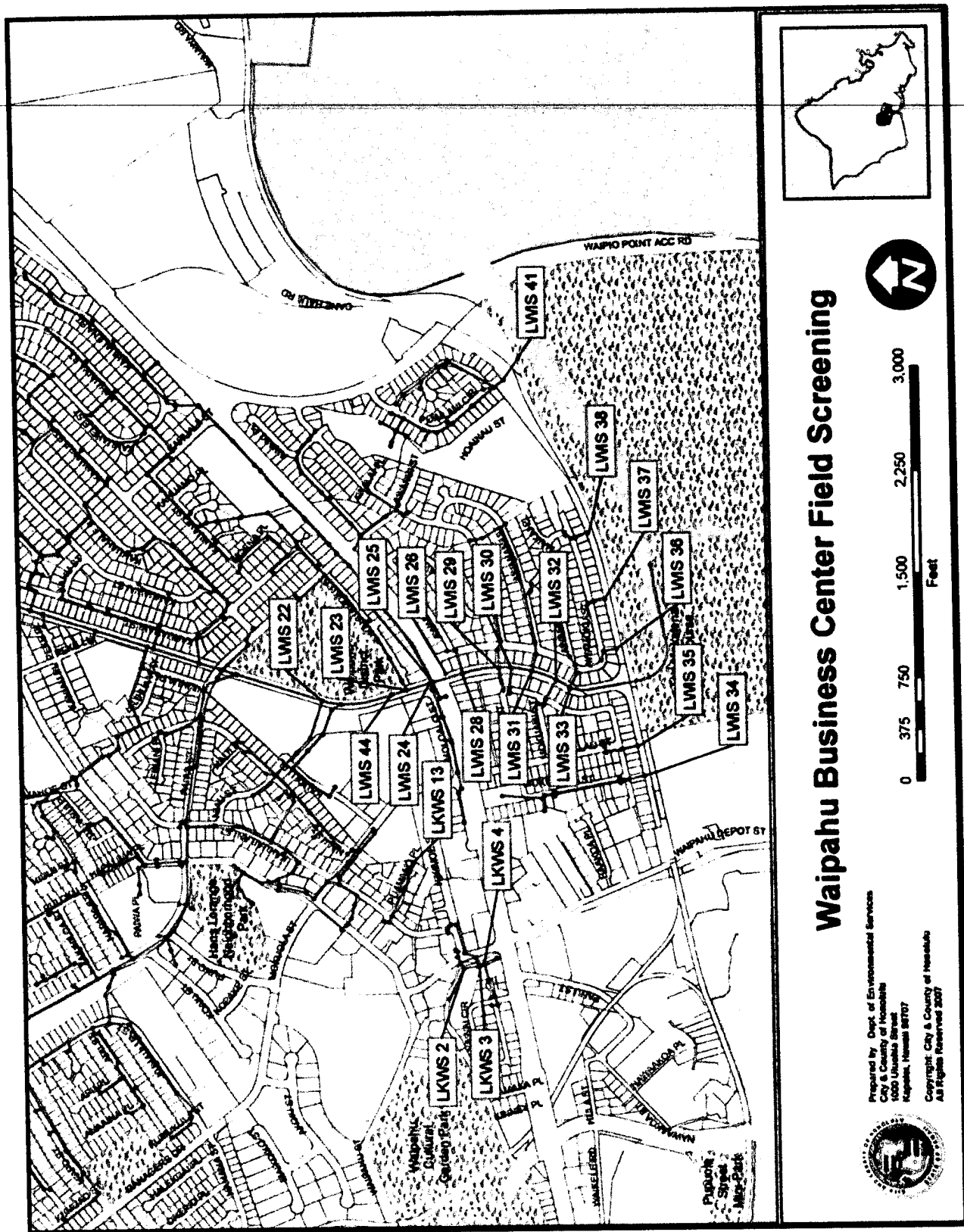
Note: \* Not part of FY92 permit.





**Figure 7-2: Aiea/Pearl City Area 1 Field Screening**





### Figure 7-4: Waipahu Business Centers

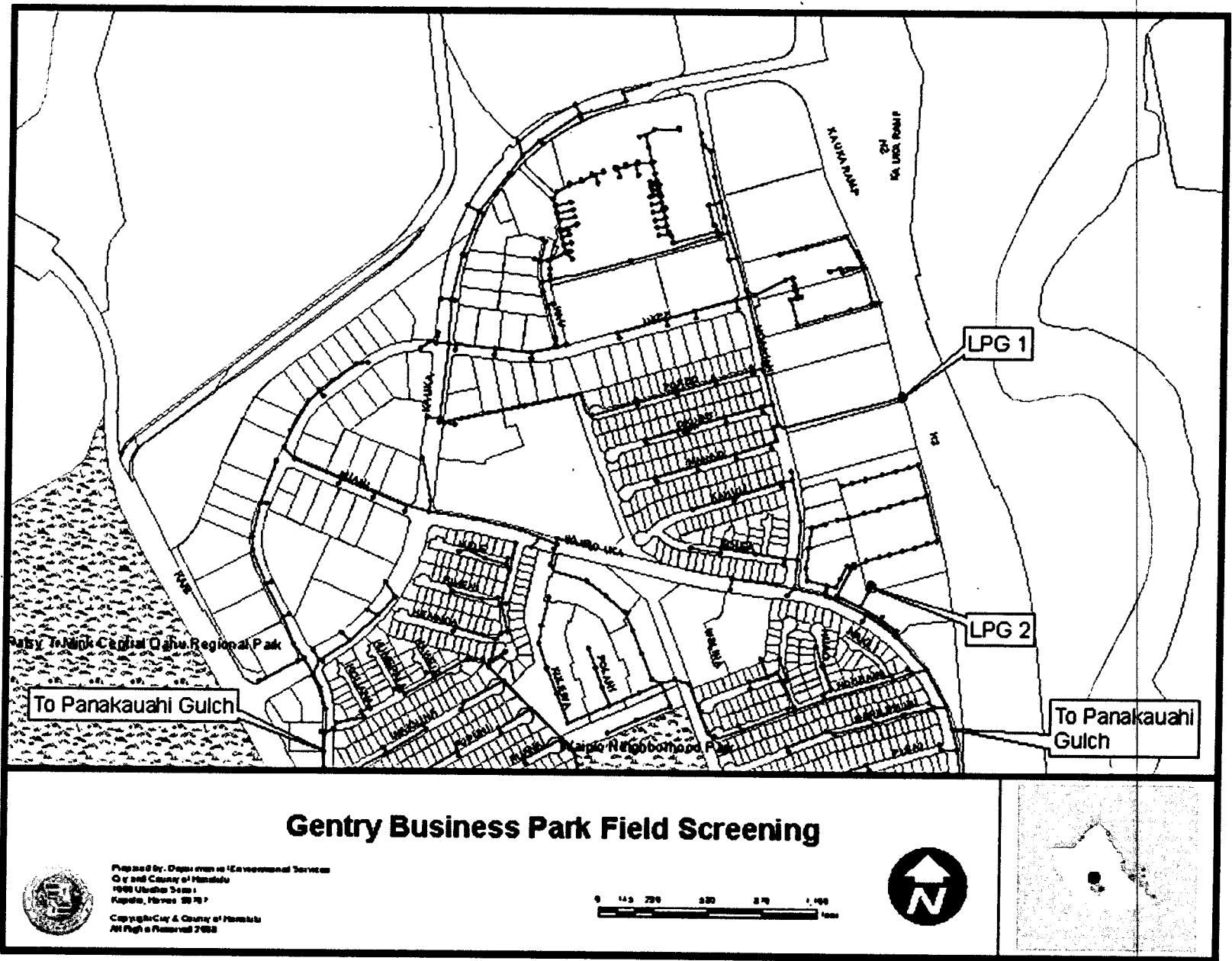


Figure 7-5: Gentry Business Park





## **7.5 INSPECTION OF INDUSTRIAL AND COMMERCIAL FACILITIES AND ACTIVITIES**

The selection of the target properties are based on the following criteria:

1. Located next to the City's MS4,
2. Have approved drain connection licenses from DPW or DPP,
3. Have received prior Warnings of Violation or Notices of Violation from ENV or the former DPW,
4. Either have or have applied for a DOH NPDES permit for industrial storm water discharges,
5. Included in the list of industrial facilities in Part 2 of the city's original NPDES application in 1992. This list includes all known connections to MS4, gas stations, and Resource Conservation and Recovery Act (RCRA) and Superfund Amendments and Reauthorization Act (SARA) facilities,
6. Retail gasoline outlets,
7. Retail automotive services, including repair facilities,
8. Restaurants, and
9. Any other commercial facility that the City or DOH determines is contributing pollutants to the City's MS4 that may cause or contribute to an exceedance of State WQS.

The City has been conducting field screening annually. Industrial surveys are conducted during the field screening survey. In addition, the City visits selected facilities within areas that were surveyed previously. The goal of the survey is to review the activities and BMPs of the businesses. All target facilities are visited to determine whether the facilities are manufacturing units, wholesale/retail outlets with or without storage, or repair/service businesses. Where feasible, an on-site interview is conducted with the employees and they are asked to fill out an "industrial area inspection questionnaire." Public education material is distributed during the site visit. The inspection checklist used during the survey is provided in Appendix G.3.

There were 1,972 inspections conducted from FY06 to FY11. Table 7-2, Number of Inspections, is the breakdown from FY06 to FY11.

**Table 7-2: Number of Inspections**

<b>Year</b>	<b>Prioritized Area</b>	<b>No. of Inspections in Prioritized Areas</b>	<b>Revisited Areas</b>	<b>No of Inspections – Previous Prioritized Areas Revisits</b>	<b>Total</b>
FY06	Pearl City (Waihona St.) & Kaneohe (Kahuhipa St. only)	96	FY95 to FY05 Prioritized Areas	124	220
FY07	Kaneohe Industrial Park	86	FY95 to FY06 Prioritized Areas	140	226
FY08	Aiea/Pearl City	72	FY95 to FY07 Prioritized Areas	231	303
FY09	Waipahu Business Center	34	FY95 to FY08 Prioritized Areas	330	400*
FY10	Gentry Business Park	66	FY95 to FY04 and FY06 to FY09 Prioritize Areas	345	411
FY11	Kailua Semi-Industrial Park	36	FY95 to FY04 and FY06 to FY09 Prioritize Areas	376	412
<b>Total for FY06 to FY11</b>					<b>1,972</b>

\* 36 inspections conducted outside of priority areas.

During the past year, the City completed Industrial inspections in the prioritized area, including revisited areas. The breakdown is as shown below in Table 7-3: Areas and Number of Visit and Revisits (Inspections).

**Table 7-3: Areas and Number of Visits and Revisits (Inspections)**

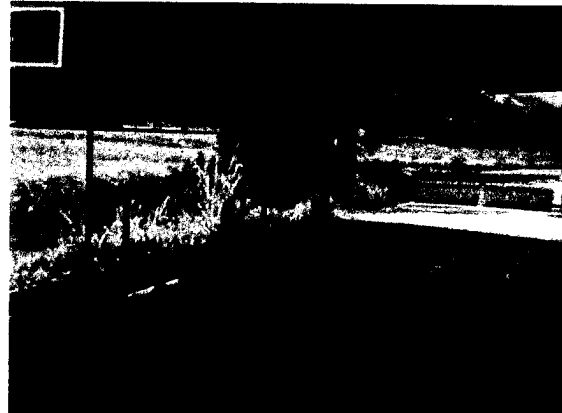
<b>Area</b>	<b>Initial Visit</b>	<b>FY Inspections</b>
Aiea-Pearl City	FY08	0
Airport	FY96	28
Ala Moana	FY02	10
Campbell	FY05	29
Gentry Business Park	FY10	13
Halawa Valley	FY03	17
Halawa-Iwaena Street	FY04	10
Iwilei	FY97	49
Kakaako	FY00	36
Kailua Semi-Industrial Park (FY11 Priority Area)	FY11	36
Kalihi-Kai	FY98, 99	44
Kaneohe	FY07	38
Mapunapuna	FY95	0
Other Visits	-	3
Outside of Priority Areas	-	46
Pearl City Industrial	FY06	22
Waipahu Business Center	FY09	19
Waipahu Industrial	FY01	12
<b>Total</b>		<b>412</b>

See Appendix G.3 and G.4 for the industrial/commercial inspection checklist and the list of industrial facilities inspected, respectively.

The following are selected pictures of inspections conducted at the Kailua Semi-Industrial Park (Figure 7-7). Figure 7-8 shows selected pictures of some industrial sites that were revisited during FY11.



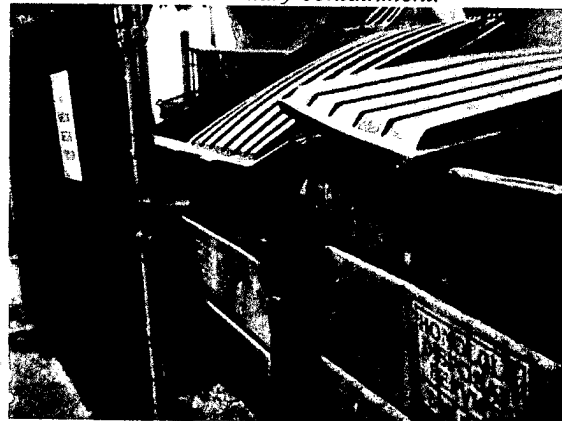
*Midas – Tires and rusted metal parts without cover.*



*MD Glass Tinting – Outdoor working area, covered with secondary containment.*



*Fatboy's – Used cooking oil drums without cover or secondary containment.*



*Hibachi - Refuse dumpsters.*



*Hamakua Auto body – Metal parts stored without cover, vehicle wash water.*



*Napa Auto Parts – Automotive batteries stored in cart.*

**Figure 7-7: Selected Facilities in Kailua Semi-Industrial Park**



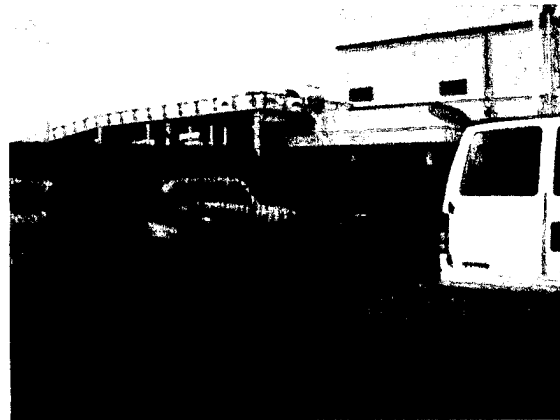
*Hawaiian Dredging (Kalihi) – Rusted equipment and metal parts stored without cover.*



*Exquisite Auto Detail (Kapolei) – Car wash water going into drain inlet.*



*Kanpai (Kakaako) – Used oil container with signs of spills.*



*Aala Tofu (Iwilei) - Empty metal drums without cover.*



*Kobayashi (Gentry) – Chemical storage includes secondary containment.*



*Au's Garden (Iwilei) – Cooking oil drums.*

**Figure 7-8: Selected Facilities in Revisited Areas**

## 7.6 ENFORCEMENT POLICY FOR INDUSTRIAL FACILITIES AND ACTIVITIES

The City has developed an enforcement policy in accordance with the requirements of the current NPDES permit which was submitted to DOH in September 2006. This policy provides for escalating enforcement actions beginning with all deficiencies found during the inspections. Should City sanctions be exhausted; DOH will be notified in order to escalate the compliance enforcement to the State level.

The City generally does not take enforcement action for deficiencies found on a first-time visit if the facility is willing to correct them. This encourages facilities to allow inspection. However, enforcement may result at a facility if deficiencies have not been corrected or the facility has been visited before.

## 7.7 TRAINING

Staff training was conducted within the 180 days of the effective date of the permit on how to perform industrial and commercial inspections; the types of facilities covered by the General Industrial Storm Water permit; or any other applicable NPDES permit; elements in a SWPCP for industrial facilities; BMPs and source control measures for industrial and commercial facilities; and inspection and enforcement techniques. The training presentation for Industrial and Commercial facilities can be found in Appendix G.5.

Training is conducted on an annual basis. Table 7-4 lists the number of attendees who were trained.

**Table 7-4: Training in Industrial and Commercial Inspections**

<b>FY</b>	<b>Attendees</b>
07	10
08	9
09	11
10	14
11	8

## 7.8 ASSESSMENT OF PROGRAM EFFECTIVENESS

- |                    |                                                                                                                                                |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Objective 1</i> | <i>Continue field screening efforts to monitor and educate [the] business about illegal discharges to the MS4.</i>                             |
| <i>Objective 2</i> | <i>Continue the licensing program for drainage connections.</i>                                                                                |
| <i>Objective 3</i> | <i>Train City employees and their contractors on detection and elimination of illicit discharges.</i>                                          |
| <i>Objective 4</i> | <i>Continue enforcement program and follow-up with businesses that have the potential to produce an illicit discharge into the City's MS4.</i> |

### 7.8.1 Performance Measure 1

*Number of repeat or new businesses that are in violation of the MS4 permit.*

The effectiveness of the Industrial and Commercial Activities Program can be accessed through the enforcement results.

The number of facilities sent deficiency reports (all types of deficiencies-potential NPDES non-filer, no drain connection license, discharges into MS4, etc.):

- FY06: 3,
- FY07: 75 (25 were for deficiencies that are not considered deficiencies now),
- FY08: 31,
- FY09: 57,
- FY10: 58, and
- FY11: 16

### 7.8.2 Performance Measure 2

*Number of businesses that apply for a drain connection license.*

Facilities sent deficiencies for having no drain connection license:

- FY07: 17,
- FY08: 17,
- FY09: 24,
- FY10: 33, and
- FY11: 16

Facilities that have obtained drain connection license based on inspections by ENV:

- FY07: 7,
- FY08: 0 (not yet determined), may still be in the process of applying for drain connection licenses),
- FY09: 1,
- FY10: 3, and
- FY11: 1

### **7.8.3 Performance Measure 3**

*Number of suspected illicit discharges.*

- FY07: 33,
- FY08: 11,
- FY09: 10,
- FY10: 18, and
- FY11: 16

### **7.8.4 Performance Measure 4**

*Number of follow-up visits that show deficiencies noted in previous inspections.*

- FY07: 21 revisits (1 facility sent enforcement letter),
- FY08: 7 revisits (0 follow-up visits that show deficiency),
- FY09: 6 revisits (0 follow-up visits that show deficiency),
- FY10: 49 revisits (6 follow-up visits that show deficiencies, 1 facility sent enforcement letter), and
- FY11: 3 revisits (1 follow-up visits that show deficiencies).

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